GOAL TO MINIMIZE DIOXIN/FURAN EMISSIONS USING GOOD COMBUSTION PRACTICE UNTIL NEW CONTROL SYSTEM IS INSTALLED

1. Dioxin/Furan minimization approach developed through an understanding of formation mechanisms

    a. Incomplete destruction of Dioxin/Furan in the waste

        Since it is not expected that the waste will contain significant levels of Dioxin/Furan, this is not a likely Dioxin/Furan formation mechanism.

    b. Dioxin/Furan formation in the incinerator

        Dioxin/Furan are formed in the incinerator through reactions of hydrocarbons and chlorine. These reactions are minimized by the use of **good combustion practices**.

    c. Dioxin/Furan formation in the waste heat boiler and controls

        Dioxin/Furan are formed in the waste heat boiler and controls through reactions of hydrocarbons, chlorine, and particulate in the temperature range between 392 and 932 F. These reactions are also minimized by the use of **good combustion practices**.

2. Dioxin/Furan formation in incinerator, waste heat boiler and controls will be minimized through **good combustion practice**.

    a. **Good combustion practice** as defined by the EPA includes limits on:

        i. Steam production
        ii. Carbon monoxide emissions
        iii. Inlet temperature to particulate matter control device

    b. The current approval order establishes limits on each of these **good combustion practice** parameters.

    c. Dioxin/Furan emissions will be minimized by enforcement of the current permit limits on **good combustion practice**.

DIOXIN/FURAN EMISSIONS FROM MUNICIPAL WASTE INCINERATOR USING GOOD COMBUSTION PRACTICE

1. Basis of Dioxin/Furan emission limit of 360 ng/dscm at 7% Oxygen in current approval order

    a. Limit based on results of Dioxin/Furan test conducted in 1993 while the unit was operating under **good combustion practice**.

    b. Limit is equal to highest level from three test runs.

2. Compliance with the Dioxin/Furan limit from 1996 to 2000.

    a. Source has exceeded Dioxin/Furan limit in 5 out of 12 tests.

    b. All tests were conducted using **good combustion practice**.

3. EPA established a level of 1,000 ng/dscm at 7% Oxygen as a typical value (midpoint) for municipal waste incinerators without add-on controls such as carbon injection (see EPA-453/R-95-0136, Background Information Document for Promulgated Standards and Guidelines, October 1995).

    a. Source has exceeded the EPA's midpoint value in 1 out of 12 tests.

    b. The average of all tests at the source is well below the EPA's midpoint value while utilizing **good combustion practice**.